

### **REMARKS**

In the Office Action, the Examiner rejected claims 1-29. By this paper, Applicants have amended claims 1, 3, 14, 20, and 28 for clarification of certain features to expedite allowance of the claims and amended claims 22-24 to correct a typographical error. Applicants have canceled claim 21, as it was mistakenly omitted from the original application. Further, new claims 30-35 have been added. No new matter has been added. Upon entry of these amendments, claims 1-20 and 22-35 are pending in the present application and are believed to be in condition for allowance. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

### **Claim Rejections under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 1, 2, 14, 15, 20-22, and 29 under 35 U.S.C. § 102(e) as being anticipated by Cypher (U.S. Pub. No. 2004/0088636, hereafter referred to as “the Cypher reference”). Applicants respectfully traverse this rejection.

### ***Legal Precedent***

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *See Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir.1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *See In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir.1990). That is, the prior art reference must show the *identical invention “in as complete detail as contained in the ... claim”* to support a *prima facie* case of anticipation. *Richardson v. Suzuki*

*Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Thus, for anticipation, the cited reference must not only disclose all of the recited features but must also disclose the *part-to-part relationships* between these features. See *Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 486 (Fed. Cir. 1984). Accordingly, Applicants need only point to a single element or claimed relationship not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. A *strict correspondence* between the claimed language and the cited reference must be established for a valid anticipation rejection.

Moreover, Applicants submit that, during patent examination, the pending claims must be given an interpretation that is *reasonable* and *consistent* with the specification. See *In re Prater*, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); *In re Morris*, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); see also M.P.E.P. § 2111 (describing the standards for claim interpretation during prosecution). Indeed, the *specification* is “the primary basis for construing the claims.” See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (citations omitted). It is usually dispositive. See *id.* Interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. See *In re Cortright*, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); see also M.P.E.P. § 2111. That is, recitations of a claim must be read as they would be interpreted by those of ordinary skill in the art. See *Rexnord Corp. v. Laliram Corp.*, 60 U.S.P.Q.2d 1851, 1854 (Fed. Cir. 2001); see also M.P.E.P. § 2111.01. In summary, an Examiner, during prosecution, must interpret a claim recitation as one of ordinary skill in the art

would reasonably interpret the claim in view of the specification. *See In re American Academy of Science Tech Center*, 70 U.S.P.Q.2d 1827 (Fed. Cir. 2004).

### ***Deficiencies of the Rejection***

Applicants respectfully assert that the Cypher reference does not disclose each and every feature of independent claims 1, 14, 20, and 29. For example, independent claim 1, as amended, recites “a *redundant memory system* comprising...configuring access to the memory module based on said error type *to preserve the redundancy of the memory system and insuring write access to the memory module is not prohibited.*” (Emphasis added). Independent claim 14, as amended, recites “a *redundant memory system* comprising...an error-type memory controller that configures said access *to preserve the redundancy of the memory system and insure write access is not prohibited.* (Emphasis added). Independent claim 20, as amended, recites “[a] *redundant memory system* comprising... wherein the memory controller is further configured *to preserve the redundancy of the memory system and insure write access is not prohibited.*” (Emphasis added). Finally, independent claim 29, as amended, recites “[a] *redundant memory system*...comprising...*means for preserving the redundancy of the memory system and insuring write access is not prohibited.*”(Emphasis added).

As quoted above, in the context of a redundant memory system, each of the recited independent claims provide for preserving the redundancy of the memory system and insuring write access is not prohibited. In sharp contrast, the Cypher reference fails to disclose either a redundant memory system or preserving redundancy *and* insuring write access is not prohibited.

More specifically, the Cypher reference discloses a memory controller with a check/correct circuit and a remap circuit. *See* Cypher, p. 1, ¶ [0009]. Together, these circuits can detect an error, correct the data if possible, and remap the data blocks so that the failed memory device is not used. *Id.* The system disclosed in the Cypher reference, however, is not redundant. Rather, the Cypher reference discloses a simple EDC/ECC correction scheme. *See* Cypher, p. 1, ¶ [0007] – [0008]. If the EDC/ECC correction fails, there is *no redundancy available* in the Cypher reference to reconstruct the uncorrectable data. Accordingly, the memory controller in the Cypher reference is not a “redundant memory system.” For this reason alone, Applicants respectfully request withdrawal of the pending Section 102 rejection and allowance of claims 1, 14, 20, and 29.

In addition, Applicants also respectfully assert that the Cypher reference does not disclose preserving “the redundancy of the memory system” and “insuring write access to the memory module is not prohibited” as recited in claim 1, for example. Rather, after a memory module failure, the Cypher reference discloses a “data remap control circuit” that remaps the use of the memory modules “to eliminate the storage of bits in the failed memory device.” *See* Cypher, p. 6, ¶ [0066]. More specifically, the remap strategy employed by the Cypher reference would result in a loss of any redundancy in the memory system, as the memory remap “eliminates the storage of bits” in the failed memory module. *Id.* As a result of this strategy, further writes to the failed memory module are prohibited. In contrast, the above-quoted claims recite preserving redundancy by controlling or configuring access to the failed memory module and insuring write access to the failed memory module is not prohibited. For at least this additional reason,

Applicants respectfully request withdrawal of the pending Section 102 rejection and allowance of independent claims 1, 14, 20, and 29, as well as the claims that depend therefrom.

**Claim Rejections under 35 U.S.C. § 103(a)**

In the Office Action, the Examiner rejected claims 3-13, 16-19, and 23-28 as being unpatentable over the Cypher reference. Applicants respectfully traverse this rejection.

As discussed above with reference to the Section 102 rejection, the Cypher reference does not disclose “a redundant memory system,” preserving the “redundancy of the memory system,” or insuring “write access is not prohibited” as recited in independent claims 1, 14, 20, and 29. In light of these clear deficiencies in the Cypher reference, Applicants respectfully submit that claims 3-13 are allowable based on their dependency on claim 1, claims 16-19 are allowable based on their dependency on claim 14, and claims 23-28 are allowable based on their dependency on claim 20. Therefore, claims 3-13, 16-19, and 23-28 are believed to be patentable over the Cypher reference. Thus, Applicants respectfully request withdrawal of the pending Section 103 rejection.

**New Claims**

Applicants respectfully request that new independent claim 30 and dependent claims 31-35 be considered. These claims are fully supported by the specification, and Applicants respectfully submit that the prior art of record does not disclose the recited subject matter of claims 30-35. For at least this reason, Applicants respectfully submit that new claims 30-35 are allowable over the cited references, taken alone or in combination with each other.


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**Conclusion**

Applicants respectfully submit that all pending claims are in condition for allowance. However, if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

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